

CLAIMS

What is claimed is:

1. A method for forming a wafer package, comprising:
 - forming a die structure comprising:
 - a first wafer;
 - a device on the base wafer;
 - a second wafer mounted atop the first wafer with a first seal ring around the device and a second seal ring around a via contact, the via contact defining a via cavity;
 - forming a trench in the second wafer around the first seal ring;
 - filling the trench and the via cavity with a sealing agent;
 - patterning a topside of the second wafer to remove excessive sealing agent and to expose a contact pad of the via contact; and
 - singulating a die around the first seal ring.
2. The method of claim 1, wherein said forming a trench comprises performing a deep reactive ion etch to form the trench.
3. The method of claim 1, wherein said forming a trench comprises using a saw to form the trench.
4. The method of claim 1, wherein said patterning a topside of the second wafer comprises wet etching the sealing agent down to the contact pad.
5. The method of claim 1, wherein said patterning a topside of the second wafer comprises dry etching the sealing agent down to the contact pad.
6. The method of claim 1, wherein said singulating the die comprises sawing the die.
7. The method of claim 1, wherein the sealing agent is selected from the group consisting a photoresist, a polyimide, a B-staged bisbenzocyclobutene (BCB), a spin-on-glass, a glass, a pyrex, an oxide, and a nitride.
8. The method of claim 1, wherein the sealing agent is a polymer, the method further comprising depositing on the contact pad a thin film selected from the group consisting of a metal and a dielectric.

9. A device package, comprising:
 - a first wafer;
 - a device on the base wafer;
 - a second wafer mounted atop the first wafer with a first seal ring around the device and a second seal ring around a via contact, wherein the via contact defines a via cavity;
 - a first sealing agent forming a parameter around the first seal ring; and
 - a second sealing agent filling the via cavity.

10. The device of claim 9, wherein the sealing agent is selected from the group consisting a photoresist, a polyimide, a B-staged bisbenzocyclobutene (BCB), a spin-on-glass, a glass, a pyrex, an oxide, and a nitride.

11. The device of claim 9, wherein the sealing agent is a polymer, the device package further comprising a thin film on a contact pad of the via contact above the second sealing agent, the thin film selected from the group consisting of a metal and a dielectric.